

2010 Environmental Audit Update

Each year, the NPS Commercial Services Program conducts environmental audits at various concession sites throughout the NPS. The main focus of the audits is to proactively help concession operations achieve and maintain superior environmental performance by identifying areas of non-conformance with environmental regulations and requirements, as well as areas where best management practices (BMPs) can be implemented to improve operations. In addition, environmental audits work to identify BMPs and exceptional environmental practices that concessioners have already put in place.

In fiscal year (FY) 2010, the NPS Commercial Services Program conducted environmental audits of 107 concession operations located within II national parks throughout the country. These audits included 10 onsite audits for more complex facilities and operations (e.g., Category I and II concession contracts), and 97 telephone audits for less complex, remote, or difficult to access operations (e.g., Category III concession contracts).

2010 Audit Season in Review

Audit findings are assigned rankings according to the following scheme:

Priority 1 findings are non-conformances with laws and regulations that pose immediate, actual, or potential harm to human health or the environment. These findings have a deadline for closure of 90 days from issue of the Preliminary Environmental Audit Report (EAR).

Priority 2 findings are non-conformances with laws and regulations that do not pose an immediate threat to human health or the environment. Priority 2 findings have a deadline for closure of 180 days from issue of the Preliminary EAR.

Priority 3 findings are non-conformances with Executive Orders (EOs); Department of the Interior (DOI), NPS, or park policies; or the concession contract. Priority 3 audit findings also have a deadline for closure of 180 days from issue of the Preliminary EAR.

BMPs are voluntary actions that can improve concessioner environmental management

through pollution prevention, proactive planning, and initiatives in moving towards sustainability. While strongly encouraged, BMPs are not required to be implemented.

The table below indentifies the number of audit findings, BMPs, and exceptional practices identified during the 2010 audit season (see related article in this issue's 'Concessioner Highlights'), including the number of findings that have already been closed.

Recent Changes to the Audit Program

For the FY2010 audit season, overall reporting timelines were significantly reduced to facilitate faster delivery of the Final EAR to the park and concessioner. As a result of the changes that were implemented, the entire audit process, from site visit or telephone audit to Final EAR, was completed within 4-6 weeks.

Audit Scope Revisions

Beginning in FY 2010, environmental audits no longer include Hazard Communication (HAZCOM), Respiratory Protection, or Emergency Planning findings and recommendations. While regulations pertaining to these topic areas are still applicable to concessioner operations, it was determined that these topic areas are related more to safety than to the environment, and thus should be addressed in the concessioner's Risk Management Program.

Finding Type	No. Findings	No. Findings Closed
Priority 1	0	0
Priority 2	16	0
Priority 3	78	25
ВМР	311	NA
Exceptional Practice	8	NA
Total Compliance Findings	94	25
Total Findings	413	25



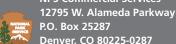
Lake Yellowstone Hotel, Yellowstone National Park

GreenLine

GreenLine is an official publication of the Commercial Services. The newsletter provides a forum in which the NPS can share information with NPS staff and concessioners about NPS Commercial Services, current environmental requirements, and best management practices. The newsletter also identifies resources available to improve concessioner environmental performance and highlights success stories.

Guest articles have been reviewed by the NPS Commercial Services and, if required, edited in collaboration with the original author.

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Ask Dr. Ima Park

I've heard that a new EO pertaining to federal environmental performance was issued in 2009. What exactly is an EO? What does the new EO require, and how will it affect my concession operation?

Dr. Ima Park: An EO is an order issued by the President of the United States acting as head of the Executive Branch; it is not a law that has been passed by Congress. Although there is no constitutional provision allowing for the issuance of EOs, U.S. Presidents have used such directives since 1789 to help manage operations internal to the federal government. Provided that they are based either on presidential constitutional powers or laws passed by Congress, EOs have the full force of law.

Requirements outlined in EOs must be implemented by all federal institutions; however, they do not apply to concessioners unless directed by policy and required by contract. Even if not required directly by your concession contract, working to support the NPS in achieving the goals outlined in EOs is encouraged as a BMP.

EO 13514 – Federal Leadership in Environmental, Energy, and Economic Performance

On October 5, 2009, President Obama signed EO 13514 "to establish an integrated strategy towards sustainability in the federal government." This regulation expands upon the environmental performance requirements of EO 13423 set forth by President Bush in 2007, and makes the reduction of greenhouse gas (GHG) emissions a priority of federal agencies.

In general, EO 13514 requires federal agencies to set a 2020 GHG emissions reduction target, increase energy efficiency, reduce fleet petroleum consumption, conserve water, reduce waste, support sustainable communities, and leverage



federal purchasing power to promote environmentally-responsible products and technologies. Specifically, this EO requires federal agencies to meet the following goals (partial list, baselines not included):

- Reduce petroleum consumption by 2% per year through FY 2020.
- Ensure at least 15% of existing and leased buildings (>5,000 gross sq ft) meet the Guiding Principles for High Performance Sustainable Buildings by FY 2015.
- Reduce industrial, landscaping, and agricultural water use by at least 20% by FY 2020.
- Reduce potable water use intensity by at least 26% by FY 2020.
- Achieve a 50% solid waste diversion rate by FY 2015. Reduce paper use, increase composting, and decrease chemical use.
- Ensure 95% of all new contracts require products and services that are energy-efficient, water-efficient, biobased, environmentally preferable, non-ozone depleting, contain recycled-content, non-toxic or less-toxic alternatives.
- Procure products that are Electronic Product Environmental Assessment Tool (EPEAT)-registered, ENERGY STAR® labeled, or Federal Energy Management Program (FEMP)-designated equipment.

To learn more about EO 13514, visit http://www.fedcenter.gov/programs/eo13514/.



Reducing Your Environmental Impact

Incorporating environmentally preferable practices and products into concession operations and services not only helps the NPS meet its sustainability goals, but also improves the global environment. By considering some of the following environmental alternatives you can help reduce your impact on the national parks and the planet.

Alternative Vehicles and Fuels

According to Fueleconomy.gov, a resource managed jointly by the Department of Energy (DOE) and the Environmental Protection Agency (EPA), a typical vehicle emits about six to nine tons of carbon dioxide per year. By purchasing alternative vehicles, those that have high fuel efficiency or can run on nonpetroleum fuels, you can help reduce GHG emissions. You can additionally reduce your carbon footprint by optimizing the number of trips and vehicles you operate in and out of the park.

While most fuel is derived from petroleum, alternative fuels are made from a variety of natural and renewable resources including corn, vegetable and animal fats, natural gas, and hydrogen produced from hydropower (see www.nypa.gov/aro5/2005AR/sec4.htm for more information on hydropower-to-hydrogen). To find out what alternative

fuels are available in your area, try the DOE's search tool (www.afdc.energy.gov/afdc/locator/stations/).

LEED Certification

When planning your next renovation or construction project with the NPS, consider upgrading the building to be Leadership in Energy and Environmental Design (LEED) certified. LEED buildings are designed to save energy and water, lower carbon dioxide emissions, improve indoor air quality, and use resources responsibly. LEED features and certifications can greatly reduce environmental impacts, yield financial savings, and attract visitors.

Green Energy

According to the Energy Information Administration, only seven percent of the energy used in the US in 2008 comes from renewable resources. Green energy sources include wind, solar, geothermal, biomass, and hydro power. If practicable and approved by the NPS, installing equipment such as solar panels or wind turbines, to reduce use of non-renewable resources can also decrease your carbon footprint. Purchasing renewable energy certificates (RECs) can be used offset your electricity usage (see the *GreenLine* 2007 Volume 7,

Issue 2 for more information on green energy options).

Source Reduction

Source reduction, also known as pollution prevention or waste prevention, refers to the process of eliminating waste before it is created. This includes designing, manufacturing, purchasing, or using materials in ways that reduce the amount or toxicity of waste created. Practicing source reduction benefits the environment through reduced energy consumption and pollution, conservation of natural resources, and extends the life of valuable landfill space. It can also save your operation money by reducing the costs associated with transportation, disposal, and recycling of waste. To learn more about source reduction visit EPA's Resource Conservation Page (www.epa.gov/epawaste/conserve/rrr/reduce.htm).

Phasing environmental alternatives and practices into your concession facilities and operations can help reduce operating costs, support NPS sustainability initiatives, and improve environmental performance, which in turn often enhances your public image. To learn about more environmental alternatives visit EPA's Sustainability Page (www.epa.gov/sustainability/).



Exceptional Practices are all in a Day's Work for Xanterra

Xanterra Parks & Resorts in Yellowstone National Park has proven that environmental stewardship is all in a day's work. The company is demonstrating its environmental commitment through cutting-edge programs that extend throughout the visitor operations and services it offers at the nation's first national park.

One component of Xanterra's environmental program at Yellowstone is the sustainable gift shop at Mammoth Hot Springs

Hotel. The store uses LED lighting for displays to save on energy costs. Shelving and display units were constructed from salvaged materials and built by local artisans, and most of the products sold in the store are made locally or with local resources, as indicated by product signage. Furthermore, a large in-store display outlines Xanterra's plans to increase product environmental signage, educate visitors about the carbon footprint of their purchases and the NPS Climate Friendly Parks (CFP) program, and develop a sustainable scorecard for each product that grades how environmentally preferable the product is.

At the historic Lake Lodge, Xanterra's environmental program includes efforts to eliminate electricity usage when guests are away from their rooms. Lights and electricity do not operate in some cabins until the



LEED-rated employee housing at Yellowstone

key card, also used for entering the cabin, is inserted in a placeholder located beside the door. In addition, literature about Xanterra's Ecologix environmental management system (EMS) is creatively communicated to lodging guests by placing a stuffed animal on the bed in each guest room, surrounded by literature that conveys the EMS information.

Another component of Xanterra's environmental program is their water conserving, corporate laundry facility. The facility uses a



continuous batch washing machine nicknamed "the tunnel," which uses recycled water for portions of its operation. This water recovery system saves approximately 3,500 gallons of water daily in laundering over 2.2 million pounds of laundry annually!

Xanterra staff also developed an extremely effective method for identifying, storing, and disposing of different types of waste. At each hazardous and universal waste storage area, posters identify key waste types and identify how items should be labeled, stored, and disposed. The posters are color-coded for each type of waste, and are easy to read and understand. Appropriate labels are stored at each location so that wastes can be labeled correctly. This is an effective method of educating staff about different wastes, while providing them with the tools they need to correctly manage them.

Finally, in coordination with the park, Xanterra constructed two employee housing units using the LEED Rating System®. LEED provides a framework for identifying and implementing practical and measurable green building design, construction, operations, and maintenance solutions. The houses were the first buildings in Montana to receive LEED certification.

For more information about Xanterra Parks & Resort's environmental program, visit www.xanterra.com/environmental-performance-375.html.

Small Concession Operations – Big Impacts

In FY 2010, the NPS Commercial Services Program conducted telephone audits of 97 concessioners operating under Category III contracts. The operations audited span four regions and six parks, and offer services ranging from air taxis, to canoe rentals, to backcountry lodges. Completing these audits proved to be an enlightening experience for the auditors, as well as the parks and concessioners. Seven concessioners were recognized for exceptional practices,

demonstrating their commitment to environmental protection beyond just compliance, and proving that you do not need to be a big operation to make a big environmental impact.

Midwest Region - Buffalo National River

Buffalo Outdoor Center, Inc. was awarded an exceptional practice for the use of two hybrid vehicles, comprising 50% of their fleet, to transport canoes, kayaks, and rafts into and out of the park.

Intermountain Region – Canyonlands National Park

Colorado River and Trail Expeditions, Inc. received an exceptional practice for developing an extensive interpretive training program, which includes an annual company retreat attended by all staff. Specific elements of the program include teaching the importance of preserving the night sky, guest instructors on topics such as astronomy, online training, access to specific books

Guest Services Incorporated Puts Innovative IPM Techniques into Practice



Photo of April courtesy of Sprague Pes

Incorporated (GSI) operates two lodging facilities within Mount Rainier National Park. When GSI discovered that some pesky new residents had

Guest Services

moved into their hotels, they immediately called in a specialist to take care of the problem – April, the Bed Bug Inspection Canine.

In recent years, bed bug infestations at lodging operations have been popping up across the country in record numbers. Bed bugs are parasites that are spread by humans and the inanimate objects they travel with.

It is important to note that bed bugs are not an indicator of poor sanitation, and that an infestation can happen anywhere, to anyone, at anytime.

Because bed bugs are very small and hide in tiny cracks and crevices, lodging operators are often unaware that they have bed bugs until they become a large problem. To prevent outbreaks from occurring in the first place, GSI found that the most effective way to detect the presence of bed bugs is through an innovative practice that relies on trained canines. Applying the same methodology and training used for bomb-sniffing dogs, bed bug inspecting canines have been trained and put to work in places like New York, Florida, and Japan. Due to their keen sense of smell, bed bug inspection dogs have proved to be more reliable than

human inspectors – they literally sniff out the problem!

Following the identification of infested areas, GSI applied steam heat treatments (above 120 degrees F) to kill all life stages of the bed bugs, retuning the rooms to normal use. The combination of bed bug inspecting canines and heat treatments proved to be the least invasive, least time consuming, and most effective means for identifying and eradicating beg bugs at GSI's Mount Rainier lodging operations. And best of all, it did not require the use of pesticides!

For more information on bed bugs and prevention and treatment methods visit www.nps.gov/public health/info/factsheets/fs bed bugs man.htm to review a fact sheet or contact the NPS IPM Coordinator Carol DiSalvo at 202-513-7183.

guides are encouraged to read, and training on the concessioner's Environmental Management Plan (EMP).

Canyonlands Expeditions, Inc. was recognized for implementing a company-wide carbon reduction program, and expanding it to include park visitors. In addition to tracking fuel use and purchasing carbon offsets to achieve a 100% carbon neutral business, Canyonlands Expeditions also matches 50 percent of the carbon offsets purchased by customers to offset their transportation to and from the park.

Escape Adventures, Inc. received an exceptional practice for using recycled kitchen grease from local restaurants to fuel a support vehicle used for overnight biking tours. The use of alternative fuel is one way Escape Adventures, Inc. reduces carbon emissions and the potential of harmful fuel releases into the environment.

Navtec Expeditions, Inc. was awarded an exceptional practice for their extensive solid

waste minimization program, which includes a number of creative reuse strategies. Specific elements of the program include reusing old lifejackets for boat padding, using the straps and buckles to secure new lifejackets during transport to and from the river, and recycling old boating straps and gear ropes into new gear bags and drop hatches through a local company.

Alaska Region – Denali National Park & Preserve

American Alpine Institute, Ltd. was recognized for instituting a 'Green Power' discount for clients that purchase energy offsets equivalent to 50% of the energy used in their homes. In addition, American Alpine Institute, Ltd. offsets 100% of its energy consumption by purchasing green power, known as "green tags", through the local energy company.

Concession operations at Camp Denali and North Face Lodge received an exceptional practice for their creative use of organic and inorganic solid waste. Initiatives include composting all uncooked, biodegradable food scraps for eventual use in the operation's organic greenhouse and landscaped grounds, donating all table scraps to a local kennel to feed sled dogs, and providing used vegetable oil to a staff member to fuel his converted pickup truck. In addition, Camp Denali uses an alternative fuel boiler designed to accept waste paper, cardboard, and wood; and staff and guest cabins are provided wood, paper, wood chips from woodworking projects, and waxed cardboard scraps as wood-burning stove fire starters.

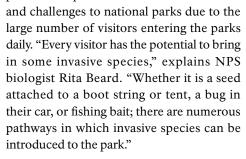


"Don't Move a Mussel" Stopping the Spread of Invasive Species

Prevention is key when it comes to mitigating the spread of invasive species in national parks, and concessioners are on the front lines. Recent invasive species management programs implemented at parks located throughout the country, such as boat washing to mitigate the spread of Quagga mussels, or selling firewood collected from within the park to prevent forest pests from entering with outside wood, have achieved much success thanks to concessioner participation and leadership.

Invasive species are non-native or foreign

organisms whose introduction to an ecosystem is likely to cause economic harm, environmental harm, or harm to human, animal or plant health. Whether the invasive species is a plant, a microscopic insect, or a 100-pound sheep, each poses a unique set of threats



Because concessioners work closely with the public they have the challenge of dealing with this issue firsthand. There are steps concessioners can take to help preserve their park's ecosystems. Concessioners should work closely with the park natural resource staff to identify ways that concessioner activities can facilitate invasive species introductions and then find ways to minimize them. By making careful decisions about what items are sold in gift shops, such as seeds, or what varieties of plants will be used for landscaping, concessioners can have a large impact on the health of national park ecosystems.

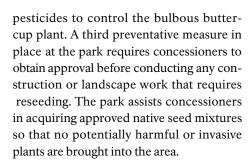
Concessioner and park activities to prevent the spread of Quagga Mussels at Lake Mead National Recreation Area provide a good example of invasive species management. Because the mussels currently inhabit the lake, the park is working to ensure that they do not spread to other areas in the western United States. Lake Mead's containment program includes educational campaigns, as well as boat washing and decontamination procedures. When visitors enter the park they are provided with educational literature printed on brightly colored paper to catch their attention. Signage posted throughout the park reminds visitors to "Stop Aquatic Hitchhikers" and "Don't Move a Mussel." In the busy sum-

mer months, many of the park's main launch ramps are staffed with Quagga experts whose job it is to speak with boaters. In addition, park staff conduct trainings to ensure concessioner and park staff are up-to-date on inspection and decontamina-

tion procedures, as well as following the rooth Meridian Initiative Standards (http://www.roothmeridian.org/).

Concessioners play a particularly important role in ensuring the inspection and decontamination of boats that have spent prolonged periods of time in Lake Mead. Boats that are slipped or moored within the park are at the highest risk of spreading the mussels outside the park. Slipped or moored boat owners must sign a contract with concessioners, allowing them to inspect the boat upon departure to ensure the boats are not contaminated. Concessioners then pass along their inspection records to the park. Decontamination, which must occur if mussels are seen attached to a boat or other equipment, involves a more stringent process than simple boat washing (see side box).

Another park that is taking multiple steps to prevent the spread of invasive species is Great Smoky Mountains. In order to prevent invasive weeds from entering the park in horse feed, one concessioner cuts their own weed free hay for its stable operations. At Cade's Cove, concessioners assist in protecting native ecosystems by using approved

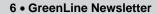


Lake Mead and Great Smoky Mountains are only two examples of the many invasive species management programs involving concessioners currently being implemented within the National Park System. As Beard stated, "It is much more effective and efficient to catch things before they are introduced, before they take hold and spread in the park than afterward....An ounce of prevention is worth tons and tons of control effort."

For more information on invasive species management please contact your park Natural Resource Staff or Integrated Pest Management (IPM) coordinator. Additional resources are available through the following websites: www.nature.nps.gov/biology/invasivespecies/ and www.nature.nps.gov/biology/ipm/.

Decontamination Steps:

- I. Drain all water from the boat and use a bleach solution to treat water that the boat carried from another location. Properly dispose of rinse water in accordance with local rules and regulations.
- Run disinfected water through the motor to purge larvae from the engine's cooling system.
- 3. Scrub all surfaces with soapy water, paying special attention to small crevices.
- 4. Use hot, high-pressure water to hose down the boat.
- Dry the boat and all equipment, and prevent the boat from reentering the water for one to two weeks depending on the outside air temperature.



The Ins and Outs of Environmental Purchasing

Environmental purchasing (EP) refers to adding environmental considerations to purchasing decisions along with traditional factors such as performance, price, health and safety. It means considering the entire lifecycle of a product - from the raw materials required, to packaging and disposal - and purchasing items that have a lesser impact on the environment and human health when compared to conventional products and services. For example, EP programs can encompass everything from purchasing greener office supplies (100 percett post-consumer content recycled paper versus paper made from virgin materials), to purchasing local and organic food (versus conventional produce shipped from far-away farms that used pesticides), to selling reusable water bottles to guests for their outdoor expeditions (versus disposable plastic bottles), to purchasing electricity from utility companies that support sustainable options such as wind power.

Examples of preferable products are those: made with post-consumer recycled-content, water-efficient, energy-efficient, made from renewable resources, made using energy from renewable resources, locally-produced, organic, non-toxic, biodegradable, or compostable.

One way concessioners can support efforts to buy, use, and sell environmentally-preferable products and services is by developing an EP program that outlines their specific purchasing preferences. By developing an EP program, concessioners can support the national parks in meeting environmental purchasing requirements and goals, while saving money and increasing public relation opportunities.



Resources for locating environmentally preferable products:

- EPA's Environmentally Preferable Purchasing website: www.epa.gov/epp
- Energy Star: www.energystar.gov/
- WaterSense: www.epa.govwatersense
- BioPreferred program: www.biopreferred.gov/aboutus.aspx
- Significant New Alternatives Policy (SNAP) Program: www.epa.gov/ozone/snap/
- GreenSeal: www.greenseal.org
- Local, organic food locator: www.localharvest.org/csa/
- The Green Power Network: http://apps3.eere.energy.gov/greenpower/buying/buying_power.shtml

Operating and Maintenance Plan Reminder

Operating and Maintenance Plans are an integral part of every concession contract, and can be updated by the park annually. These plans can include specific environmental management requirements. Concessioners should review Operating and Maintenance Plan requirements with key staff members on an annual basis to ensure that they understand them, and are doing their part to conserve natural and cultural resources. For questions or assistance about either plan please contact your park concession specialist.

Get Paid For Trash

Ever wonder how to broaden your recycling efforts? TerraCycle has found a way to make non-recyclable waste materials, such as energy or candy bar wrappers, into affordable, practical, and stylish products such as office supplies and toys. Founded in 2001, by a 19-year-old Princeton University student, TerraCycle's mission is to "prove that there is no such thing as garbage," by diverting what is traditionally thought of as waste from landfills and creating usable products. This process, known as "upcyling", limits the amount of new products that need to be produced. Participation in TerraCycle is free and open to anyone, anywhere. For every item you upcycle, a small donation is made to a nonprofit organization or school of your choice. For more information on how to become part of TerraCycle's "eco-revolution" visit www.terracycle.net.



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Branch Chief's Corner

The past year has brought the importance of environmental management to the forefront. From forest fires to oil spills, the relationship between a healthy environment and a healthy economy has been evident. In consideration of this year's environmental events, we are focusing this issue of the *GreenLine* on park and concessioner efforts to improve environmental performance.

In Ask Dr. Ima Park, Considering Environmental Alternatives, and Environmental Purchasing, we discuss the Services' obligation to incorporate sustainable practices to meet EO 13514, and ways concessioners can help us in these efforts. In 2010 Environmental Audit Update, we provide an overview of the 2010 environmental audit season, including some changes to the program which will continue to be implemented in 2011. In Small Concession Operations – Big Impacts, we highlight 7 concession operations where exceptional practices were identified during this year's environmental audits.

Environmentally-friendly methods for manag-

ing bed bugs are discussed in GSI Puts Innovative IPM Techniques into Practice, while park and concessioner-led efforts to manage invasive species are discussed in Don't Move a Mussel. Exceptional practices that have been incorporated in retail and lodging operations at Yellowstone National Park are discussed in Exceptional Practices Are All In a Day's Work for Xanterra. Finally, we provide information on recycling hard-to-recycle items, such as candy wrappers, in Get Paid For Trash.

So, I leave you to enjoy this issue of the *Green-Line* newsletter with a thought from John Muir, "When one tugs at a single thing in nature, he finds it attached to the rest of the world."

Kut M. Ramen

Contract Management Team Lead, NPS Commercial Services Program

